

Groupings of numbers and their remainders

Purpose:

The purpose of this activity is to help your child to practice the groups of 3, 4, 6, 7, 8, 9 in numbers up to 100.

Link to the Number Framework:

Place value, Stage 7 – 8

What you need:

Pack of playing cards. (Ace = 1, Jack = 0)
Score card and pencil

What to do:

Each player draws themselves a score card like this:

	Number	Groups of:	Remainder
0 – 9			
10 - 19			
20 - 29			
30 - 39			
40 - 49			
50 - 59			
60 - 69			
70 - 79			
80 - 89			
90 - 99			

Each player chooses the number of groups they want to focus on (3, 4, 6, 7, 8, or 9) and fills in the space in the first row. We refer to this number as the group number.

Shuffle the cards and place them face down between the players.

The first player draws two cards from the pile and makes a number by arranging the two digits. For example the cards 2 and 3 can be arranged as 23 or 32.

The players work out how many of their group number are in the number and how many remain. For example, if the card number is 23 then a player who chose 4 as their group number then writes 23 in the column by the 20 -29 , 5 in the next column (there are 5 groups of 4 in 20) and 3 in the remainder column.

	Number	Groups of: 4	Remainder
0 – 9			
10 - 19			
20 - 29	23	5	3

The cards are placed at the bottom of the pile and the next player has their turn.

Shuffle the cards occasionally between turns.

On each turn all players can try fill in something on their chart. The person who turns the cards over chooses what the 2 digit number is.

The winner is the first person to fill in each space on their scorecard.

What to expect your child to do:

- They should be able to instantly recall the groupings of numbers up to 10 times the group number.

For example, the number of 3s in numbers to 30, 4s in numbers to 40 etc.

- They should progress to finding the groupings of number up to 100.

For example the number of 3s in 65 can be found by knowing there are 20 groups of 3 in 60, 1 groups of 3 in 5 and 2 left over giving 21 remainder 2.

Variation:

The game can be played a number of times with players choosing different group numbers. An easier version is to find the number of 2s, 5s or 10s in numbers.

He Kupu Māori:

groups	rōpū
pack of cards	pūkei kāri
score card	kāri whiwhinga
two digit number	tau mati-rua
column	pou